

The opinion in support of the decision being entered today was not written for publication and is not precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte MARC POTIN and BERNARD LETEMP

---

Appeal No. 1997-3153  
Application 08/443,389

---

HEARD: AUGUST 15, 2000

---

Before JERRY SMITH, FLEMING and RUGGIERO, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 2, 3, 5-8 and 10-29, which constitute all the claims remaining in the application.

The disclosed invention pertains to an antenna to be incorporated into the windshield of a vehicle. The antenna is

Appeal No. 1997-3153  
Application 08/443,389

integrated with an electronic chip for demodulating an ultra-high frequency signal. The antenna and chip are disposed between at least two glass sheets.

Representative claim 10 is reproduced as follows:

10. A pane for a vehicle, comprising:

at least two glass sheets separated by an intermediate layer;

an electronic chip disposed between said at least two glass sheets for at least one of demodulating and processing an ultra high frequency signal.

The examiner relies on the following references:

Shaw, Jr. (Shaw)	3,414,902	Dec. 03, 1968
Wen et al. (Wen)	5,115,245	May 19, 1992
Hahs, Jr. et al. (Hahs)	5,235,736	Aug. 17, 1993
		(filed June 15, 1992)
Sakurai et al. (Sakurai)	3,834,075	Apr. 20, 1989
(German patent)		
Fumitaka et al. (Fumitaka)	4-323905	Nov. 13, 1992
(Japanese patent abstract only)		

The following rejections are set forth by the examiner:

1. Claims 2, 3, 8, 10-14, 16-19, 21 and 23-29 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Fumitaka in view of Hahs and further in view of Shaw.

2. Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Fumitaka in view of Hahs and Shaw and further in view of Wen.

3. Claims 5-7, 20 and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Fumitaka in view of Hahs and Shaw and further in view of Sakurai.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary

skill in the art the obviousness of the invention as set forth in claims 2, 3, 5-8 and 10-29. Accordingly, we reverse.

Despite the presence of three separate rejections as noted above, appellants have indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 5]. Consistent with this indication appellants have made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims before us will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem

from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been

considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

Since appellants have argued the claims as a single group, we need only consider a single one of the independent claims. We select claim 10 as the appropriate representative claim. With respect to claim 10, the examiner cites Fumitaka as teaching an antenna 3 integrated with an electronic chip 7 and formed on a glass surface. The examiner acknowledges that Fumitaka does not teach that the electronic chip 7 is a demodulator nor that the antenna is disposed between two glass sheets. The examiner cites Hahs as teaching that it was known to manufacture antennas and receivers (including demodulators) on the same circuit board. The examiner determined that it would have been obvious to replace the amplifier chip of Fumitaka with a demodulator chip as taught by Hahs. Shaw teaches that it was known to place vehicle antennas between two glass sheets of a windshield. The examiner concluded that it would have been obvious to the artisan to place the Fumitaka-Hahs antenna and demodulator between two glass sheets

of a windshield as taught by Shaw [final rejection, pages 4-5].

Appellants argue that the applied prior art does not teach the essential feature of each of the independent claims relating to a structure of an antenna utilized for a vehicle which includes an electronic chip connected to said antenna for demodulating a signal received by the antenna. Appellants assert that it is critical that the demodulator be located at the antenna so that the coaxial cable of Fumitaka can be eliminated. Appellants also argue that Hahs mounts an entire receiver with the antenna, whereas the claimed invention only mounts a demodulator with the antenna. With respect to Shaw, appellants argue that Shaw's antenna cannot be used for ultra-high frequency signals. Finally, appellants argue that there is no motivation for combining the teachings of Fumitaka, Hahs and Shaw absent an improper attempt to reconstruct the invention in hindsight [brief, pages 5-11; reply brief].

After a careful review of the complete record in this application, we agree with the position argued by appellants. Although the invention of representative, independent claim 10 is drafted very broadly, we are compelled to conclude that

even that broad invention would not have been suggested by the applied prior art within the meaning of 35 U.S.C. § 103.

The essence of claim 10 is that the invention comprises an electronic chip for demodulating an ultra-high frequency disposed between at least two glass sheets. The prior art applied by the examiner provides evidence that it was known to place small wire antennas between the glass sheets of a vehicle windshield (Shaw), and that it was known that a printed circuit board having an amplifier could be attached to an antenna on a vehicle windshield (Fumitaka). Neither Shaw nor Fumitaka suggests that an electronic chip for demodulating an ultra-high frequency signal could be located on the vehicle windshield.

The only reference which relates an antenna and a demodulator on the same circuit chip is Hahs. Hahs teaches that small antennas and receivers can be manufactured on a single circuit chip for use in devices such as pagers. Since a receiver must contain a demodulator as a portion thereof, the examiner uses Hahs to teach that an antenna and a demodulator were being manufactured on the same circuit chip. The examiner proposes to modify the antenna and amplifier of



Fumitaka with an antenna and receiver (including the demodulator) as taught by Hahs.

The problem with the examiner's analysis is that there is no evidence on this record that a receiver or a demodulator could operatively be located between the glass sheets of a windshield, and we cannot find a valid reason why the artisan would place a receiver between two sheets of glass on a vehicle windshield. Although claim 10 does not specifically recite a vehicle windshield, the modification of Fumitaka proposed by the examiner would require the artisan to place a receiver for a vehicle between the sheets of glass on the vehicle windshield. The conclusion is inescapable that the artisan would find no motivation for placing a receiver in the windshield of a vehicle. The claimed invention can only result from an improper attempt to reconstruct the invention in hindsight.

In summary, we can find no proper motivation for combining the teachings of Fumitaka, Hahs and Shaw in the manner proposed by the examiner to support the rejection. The additional citations of Wen and Sakurai do not overcome the deficiencies in the basic combination discussed above.

Appeal No. 1997-3153  
Application 08/443,389

Therefore, the decision of the examiner rejecting claims 2, 3,  
5-8 and 10-29 is reversed.

REVERSED

JERRY SMITH	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
MICHAEL R. FLEMING	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	

JS/ki

Appeal No. 1997-3153  
Application 08/443,389

Oblon, Spivak, McClelland  
Maier & Neustadt  
Fourth Floor  
1755 Jefferson Davis Highway  
Arlington, VA 22202